

EPA

POTENTIAL HAZARDOUS WASTE SITE LOG

SITE NUMBER

NM 00299

NOTE: The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists.

SITE NAME

Gulton Industries, Inc.

NM D035 686823

CITY

Albuquerque

STATE

New Mexico

ZIP CODE

87190

SUMMARY OF POTENTIAL OR KNOWN PROBLEM

There could be contamination of local groundwater if operating conditions were to be upset.

ITEM	DATE OF DETERMINATION OR COMPLETION	RESPONSIBLE ORGANIZATION OR INDIVIDUAL (EPA, State, Contractor, Other)	PERSON MAKING ENTRY TO LOG FORM	DATE ENTERED ON LOG (mo., day, yr.)
1. IDENTIFICATION OF POTENTIAL PROBLEM	6/23/79	SIA	Jack Ellvinger	7/18/80
2. PRELIMINARY ASSESSMENT		NM EID	Jack Ellvinger	7/18/80
APPARENT SERIOUSNESS OF PROBLEM: <input type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW <input type="checkbox"/> NONE <input checked="" type="checkbox"/> UNKNOWN				
3. SITE INSPECTION				7/18/80
4. EPA TENTATIVE DISPOSITION (check appropriate item(s) below)	7/18/80			
<input type="checkbox"/> a. NO ACTION NEEDED				
<input type="checkbox"/> b. INVESTIGATIVE ACTION NEEDED		?	Jack Ellvinger	7/18/80
<input type="checkbox"/> c. REMEDIAL ACTION NEEDED				
<input type="checkbox"/> d. ENFORCEMENT ACTION NEEDED				
5. EPA FINAL STRATEGY DETERMINATION (check appropriate item(s) below)				
<input type="checkbox"/> a. NO ACTION NEEDED				
<input type="checkbox"/> b. REMEDIAL ACTION NEEDED				
<input type="checkbox"/> c. REMEDIAL ACTION NEEDED BUT, NO RESOURCES AVAILABLE				
<input type="checkbox"/> d. ENFORCEMENT ACTION NEEDED				
<input type="checkbox"/> (1) CASE DEVELOPMENT PLAN PREPARED				
<input type="checkbox"/> (2) ENFORCEMENT CASE FILED OR ADMINISTRATIVE ORDER ISSUED				
6. STRATEGY COMPLETED				

EPA Form T2070-1 (10-79)

90067490

SUPERFUND
FILE

MAY 22 1992

REORGANIZED

N682300001

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NOT FOR PUBLIC RELEASE

PA Scoresheets

PRELIMINARY ASSESSMENT

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CERCLIS IDENTIFICATION NUMBER

STATE
NM

SITE NUMBER

DO35686823

SITE LOCATION

SITE NAME: Legal, common or descriptive name of site

Gulton Industries Inc.

STREET ADDRESS, ROUTE or SPECIFIC LOCATION IDENTIFIER

14800 Central Ave. SE

CITY

Albuquerque

STATE

NM

ZIP CODE

-

TELEPHONE

() -

COORDINATES: LATITUDE and LONGITUDE

35° 3' 48" , 106° 29' 30"

TOWNSHIP, RANGE, and SECTION

T. 10N, R. 4E, Sec 26, SE 1/4

OWNER/OPERATOR IDENTIFICATION

OWNER

George Chant

OPERATOR

Gulton Industries, Inc. Data Systems

OWNER ADDRESS

3434 Vassar Drive, NE

OPERATOR ADDRESS

6600 Gulton Ct. NE

CITY

Albuquerque

CITY

Albuquerque

STATE
NM

ZIP CODE

87106

TELEPHONE

(505) 883-8900

STATE
NM

ZIP CODE

87190

TELEPHONE

(505) 345-9031

TYPE OF OWNERSHIP

- ☒ PRIVATE
☐ FEDERAL: Agency name _____
☐ STATE
☐ COUNTY
☐ MUNICIPAL
☐ OTHER: _____
☐ NOT SPECIFIED

OWNER/OPERATOR NOTIFICATION ON FILE

- ☒ NONE
☐ CERCLA 103 C, UNCONTROLLED WASTE SITE
 DATE: _____
☐ RCRA 3001
 DATE: _____

SITE STATUS

- ☐ ACTIVE
☒ INACTIVE
☐ UNKNOWN

YEARS OF OPERATION

BEGINNING YEAR: 1956
 ENDING YEAR: 1979
☐ UNKNOWN

APPROXIMATE SIZE OF SITE

33.7 acres

SITE EVALUATION

AGENCY / ORGANIZATION

New Mexico Environment Department - Superfund Section

INVESTIGATOR

Susan Morris

CONTACT

SAME

ADDRESS

1190 St. Francis Dr. Santa Fe, NM 87502

TELEPHONE

(505) 827-2911

DATE

Sept. 1991

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GENERAL INFORMATION

Site Description and Operational History:

From 1956 to 1979, Gulton Industries, Inc., a private company, manufactured military and aerospace instruments, owned and operated a circuit board manufacturing, plating and assembly facility at 14800 and 15000 Central Ave. SE, Albuquerque. In 1978 Gulton sold the entire property to Mr. George Chant of George Chant and Associates, 3434 Vassar Drive NE., Albuquerque. In 1979, Gulton moved their operation to a new facility located at 6600 Gulton Ct. NE, Albuquerque, New Mexico. Mr. Chant retains the title to the western portion of the property, 14800 Central Ave. NE, where Gulton operated the Printed Circuit Shop, explosive testing area and the waste treatment ponds.

In 1956, Gulton began operating an electronic development, manufacturing and assembly facility at this site. During 1964 and 1965, Gulton tested explosives on site while under contract with Sandia National Laboratories (Sandia). The work involved detonating explosives and measuring the resulting signal from the ceramic circuits. According to an employee of Gulton, Sandia collected all the fragments generated by the explosions and removed them from the site according to a Gulton employee who worked at the facility during this period.

For the period of time between 1956 and 1970, no records exist concerning the waste disposal operations practiced at this site. In June, 1970, Gulton applied with the New Mexico Health and Environment Department (NMHED) for approval for a waste treatment system for their circuit board facility. On July 21, 1970, NMHED and the City of Albuquerque approved Gulton's proposed waste disposal and treatment plan that included a flash pan for the evaporation of volatile organic compounds, a hypalon lined pond for retention and concentration of metals from the process fluids, and a lined settling pond for rinse waters which released overflow into a dry tributary approximately 650 feet above the Tijeras Canyon.

In 1976, Gulton received a NPDES permit to discharge, at a maximum rate of 200 gal/day, overflow from the rinse water settling ponds into Tijeras Canyon. The permit limits were for pH, cyanide- amenable (0.025ppm) and cyanide total (0.25ppm) and did not include metals.

In 1979, Gulton moved their operations to new facility in Albuquerque. Currently, the building that housed the Printed Circuits Shop is leased and occupied by Lecroy Research Systems Corporation (Lecroy) Lecroy is an electronics firm and uses the premises for their regional sales and service office.

Probable Contaminants of Concern:

(Previous investigations; analytical data)

Chromium, copper, cadmium, cyanide, lead, nickle, platinum, paladium, zinc, TCE, TCA, Tolulene, xylene, acids, nitroaromatics, asbestos, tin,

NMHED staff inspected the Gulton site and collected water samples from the plating process waste water treatment pond in 1971, 1975 and 1977. In 1971, the results of the laboratory analyses show the effluent to contain high levels of chromium (0.15 ppm), copper (0.04), cadmium (0.16 ppm), and sulfate (2200 ppm). In 1975, NMHED field staff again sampled the effluent from the lower pond. Results of the laboratory analysis indicate that chromium and copper concentrations had increased to 2.25 ppm and 2.58 ppm respectively.

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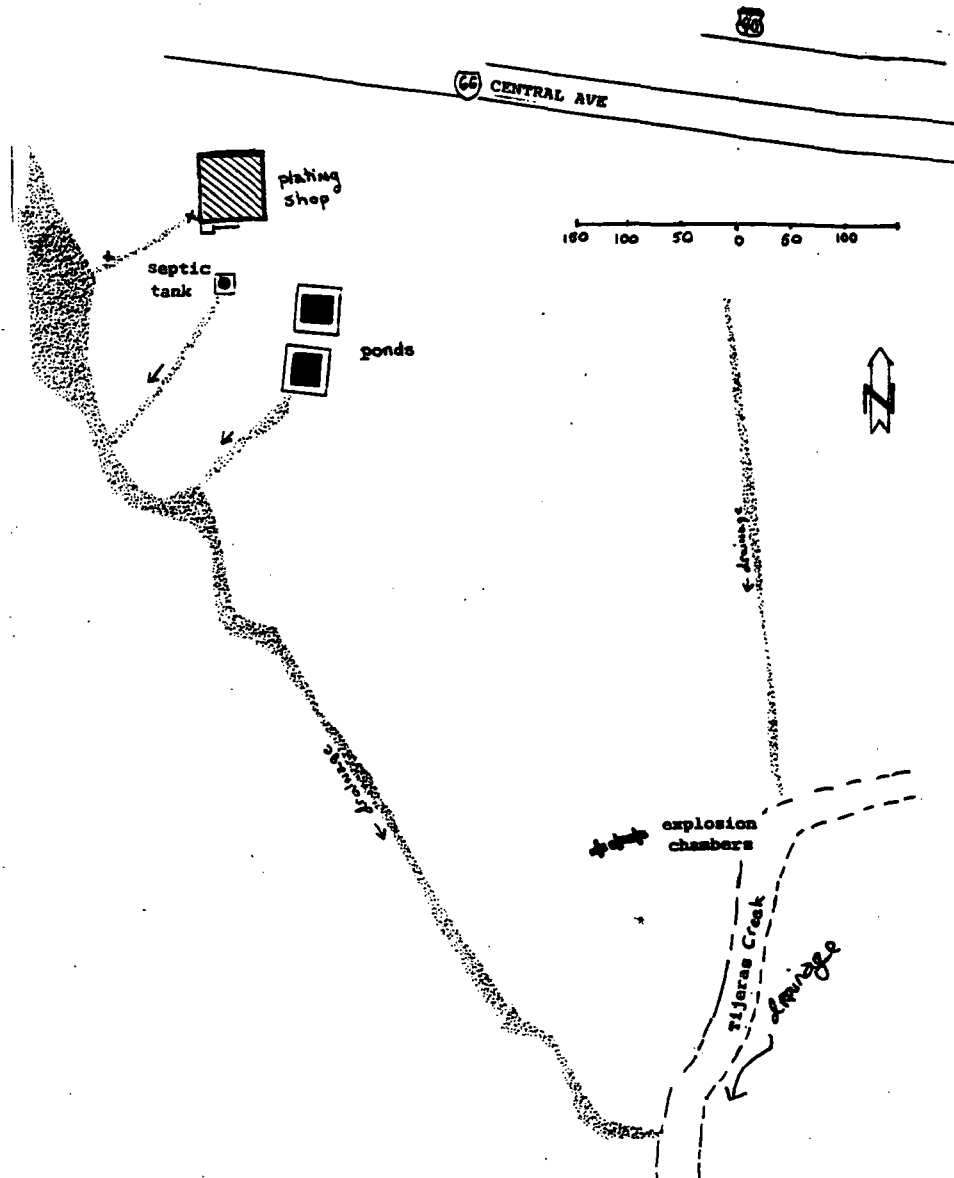
Date: Sept. 1991

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GENERAL INFORMATION (continued)

Site Sketch:

(Show all pertinent features; indicate sources and closest targets)



Source Descriptions:

Explosive testing area- explosion chambers, debris
Rinsate Ponds
Septic Tank Area
Shop drain
Soils
Debris

Waste Characteristics (WC) Calculations:

(See PA Table 1, page 5)

		AREA	WQ
explosion chambers & debris pile (pile)	= 200 ft ²	/13 ft ²	15.4
		VOL	
contaminated soils	= 775 ft ³	/67,000 ft ³	0.0
pond sediment(surface impoundment)	= 33.3 ft ³	/67.5 ft ³	0.5
septic tank (non drum containers)	= 400 ft ³ = 296 gallon/500 gallons		5.9
		WQ _{total} =	21.8
		WC =	<u>18</u>

WC =

18

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PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

Date:

Gordon University
Sept, 1991

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	
CONSTITUENT	N/A	≤ 100 lbs	> 100 to 10,000 lbs	$> 10,000$ lbs	$lbs + 1$
WASTEWATER	N/A	$\leq 500,000$ lbs	$> 500,000$ to 50 million lbs	> 50 million lbs	$lbs + 5,000$
VOLUME	Landfill	≤ 6.75 million ft^3 $\leq 250,000$ yd^3	> 6.75 million ft^3 to 675 million ft^3 $> 250,000$ to 25 million yd^3	> 675 million ft^3 > 25 million yd^3	$ft^3 + 67,500$ $yd^3 + 2,500$
	Surface impoundment	$\leq 6,750$ ft^3 ≤ 250 yd^3	$> 6,750$ ft^3 to 675,000 ft^3 > 250 to 25,000 yd^3	$> 675,000$ ft^3 $> 25,000$ yd^3	$ft^3 + 67.5$ $yd^3 + 2.5$
	Drums	$\leq 1,000$ drums	$> 1,000$ to 100,000 drums	$> 100,000$ drums	$drums + 10$
	Tanks and non-drum containers	$\leq 50,000$ gallons	$> 50,000$ to 5 million gallons	> 5 million gallons	$gallons + 500$
	Contaminated soil	≤ 6.75 million ft^3 $\leq 250,000$ yd^3	> 6.75 million ft^3 to 675 million ft^3 $> 250,000$ to 25 million yd^3	> 675 million ft^3 > 25 million yd^3	$ft^3 + 67,500$ $yd^3 + 2,500$
AREA	Pile	$\leq 6,750$ ft^2 ≤ 250 yd^2	$> 6,750$ ft^2 to 675,000 ft^2 > 250 to 25,000 yd^2	$> 675,000$ ft^2 $> 25,000$ yd^2	$ft^2 + 67.5$ $yd^2 + 2.5$
	Landfill	$\leq 340,000$ ft^2 ≤ 7.8 acres	$> 340,000$ to 34 million ft^2 > 7.8 to 780 acres	> 34 million ft^2 > 780 acres	$ft^2 + 3,400$ $acres + 0.078$
	Surface impoundment	$\leq 1,300$ ft^2 ≤ 0.029 acres	$> 1,300$ to 130,000 ft^2 > 0.029 to 2.9 acres	$> 130,000$ ft^2 > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
	Contaminated soil	≤ 3.4 million ft^2 ≤ 78 acres	> 3.4 million to 340 million ft^2 > 78 to 7,800 acres	> 340 million ft^2 $> 7,800$ acres	$ft^2 + 34,000$ $acres + 0.78$
	Pile*	$\leq 1,300$ ft^2 ≤ 0.029 acres	$> 1,300$ to 130,000 ft^2 > 0.029 to 2.9 acres	$> 130,000$ ft^2 > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
AREA	Land treatment	$\leq 27,000$ ft^2 ≤ 0.62 acres	$> 27,000$ to 2.7 million ft^2 > 0.62 to 62 acres	> 2.7 million ft^2 > 62 acres	$ft^2 + 270$ $acres + 0.0062$

1 ton = 2,000 lbs = 1 yd^3 = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WQ Total	WC Score
> 0 to 100	18
> 100 to 10,000	32
$> 10,000$	100

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GROUND WATER PA 1Y GROUND WATER USE DESCRIPTION

Describe Ground Water Use Within 4-miles of the Site:

(Provide generalized stratigraphy; information on aquifers, municipal, and or private wells)

The site is located on the western fringe of the Sandia Mountains in the lower Tijeras Canyon area. In this area the canyon cuts the Precambrian igneous and metamorphic rocks and the Quaternary alluvial deposits. Approximately 0.5 miles west of the site is the mountain-basin margin.

Both the Quaternary alluvium and the Precambrian rocks serve as aquifers and are considered to be hydraulically connected. The alluvial deposits of coarse sands and gravels are the major water bearing formation. These deposits, which in some areas exceed depths of 100 feet, line the floor and side slopes of the canyon. The productivity of the Precambrian rocks is dependent on localized permeable zones that were created by faulting, fracturing and jointing of bedrock.

Hydraulic conductivities (K) of 3.2 ft/day and 33.2 ft/day were estimated from transmissivity values obtained from aquifer performance tests conducted on two wells in the area of Tijeras Canyon, approximately 3 miles northeast of the Gulton site. The wide range of estimated K values is consistent with Freeze and Cherry's estimated ranges of hydraulic conductivity for fractured metamorphic rocks and alluvial deposits.

Groundwater movement at the site southwest towards Tijeras Creek and then west along the axis of the canyon. Hydrogeologic maps indicate that the hydraulic gradient of the ground water is $500' / 5000' = 0.1$. Across the site, the estimated depth to water varies from a few feet near Tijeras Creek to greater than 50 feet near Central Ave.

Ground water is the only source of drinking water in the Albuquerque and Lower Tijeras Canyon areas. Ground water use in the area includes domestic, municipal, industrial, and agricultural uses.

Seventy wells make up the City of Albuquerque municipal water supply system east of the Rio Grande. This system serves 370,000 individuals (or 5,285.7 people/well). Twelve active wells serve the Kirkland Air Force Base, a population of 22,000 (or 1,833 persons/well).

Privately owned wells within the 4 mile radius are located to the east of the site and are used for domestic, agricultural, and possibly industrial uses. These wells serve approximately 735 persons outside of the City of Albuquerque water distribution system.

Show calculations of ground water drinking water populations:

Albuquerque Municipal Wells (AMW)

Seventy wells make up the City of Albuquerque municipal water supply system east of the Rio Grande. This system serves 370,000 individuals (or 5,285.7 people/well).

Kirkland Air Force Base Wells (KAFW)

Twelve active wells serve the Kirkland Air Force Base, a population of 22,000 (or 1,833 persons/well).

Private Wells (PW)

Privately owned wells within the 4 mile radius are located to the east of the site and are used for domestic, agricultural, and possibly industrial uses. These wells serve approximately 735 persons (3.3 persons per house-well) outside of the City of Albuquerque water distribution system.

Ground water is the drinking water supply source for an estimated 60,783 individuals within a four mile radius of the site.

Distance (miles)	Population	Wells
0 - 1/4	0	0
>1/4 - 1/2	13	4 PW
>1/2 - 1	66	20 PW
>1 - 2	10,756	2 AMW, 56 PW
>2 - 3	25,139	4 AMW, 1 KAFB, 100 PW
>3 - 4	24,809	4 AMW, 1 KAFB
Total population	60,783	

GROUND WATER PATHWAY CRITERIA LIST

Site Name: Gulton Industries
Date: Sept, 1991

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release and identifying primary targets. It is expected that not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize a suspected release or to identify primary targets. This chart will record your professional judgment in evaluating these factors.

The "Suspected Release" section of the chart guides you through evaluation of some site, source, and pathway conditions to help hypothesize whether a release from the site is likely. If a release is suspected, use the "Primary Targets" section to guide you through evaluation of some conditions that will help identify targets likely to be exposed to hazardous substances. You may use this section of the chart more than once, depending on the number of targets you feel may be considered "primary." In the "Primary Targets" section on this sheet, record the responses for the well that you feel has the highest probability of being exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make sure that you assign a Likelihood of Release value of 550 for the pathway.

GROUND WATER PATHWAY									
SUSPECTED RELEASE					PRIMARY TARGETS				
Y :	N :	U N K N O W N			Y :	N :	U N K N O W N		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sources poorly contained?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is any drinking-water well nearby?	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is any nearby drinking-water well closed?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is waste quantity particularly large?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has foul-tasting or foul-smelling water been reported by any nearby drinking-water users?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is precipitation heavy and infiltration rate high?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Do any nearby wells have a large drawdown or high production rate?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the site located in an area of karst terrain?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are drinking-water wells located between the site and other wells that are suspected to be exposed to hazardous substances?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the subsurface highly permeable or conductive?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any circumstantial evidence of ground water or drinking water contamination exist?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is drinking water drawn from a shallow aquifer?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any drinking-water well warrant sampling?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are suspected contaminants highly mobile in ground water?		<input type="checkbox"/>	<input type="checkbox"/>		Other criteria? _____	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any circumstantial evidence of ground water or drinking water contamination exist?		<input type="checkbox"/>	<input checked="" type="checkbox"/>		PRIMARY TARGET(S) IDENTIFIED?	
<input type="checkbox"/>	<input type="checkbox"/>		Other criteria? _____						
<input type="checkbox"/>	<input checked="" type="checkbox"/>		SUSPECTED RELEASE?						

Summarize the rationale for suspected release (attach an additional page if necessary):

Summarize the rationale for Primary Targets (attach an additional page if necessary):

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GROUND WATER PATHWAY JRESHEET

Site Name: **Gulton Industries** 8
Date: **Sept. 1991**

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth to aquifer:	0-50 ft
Distance to the nearest drinking-water well:	> 200 ft

LIKELIHOOD OF RELEASE

	A Suspected Release (550)	B No Suspected Release (500 or 340)	References
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550, and use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.		340	Ref 1. Page 9
LR =		340	

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you suspect have been exposed to hazardous substances from the site (see Ground Water Pathway Criteria List, page 7). _____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you do NOT suspect have been exposed to hazardous substances from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, attach a page to show apportionment calculations.		640	Ref 1. page 9
5. NEAREST WELL: If you have identified any Primary Targets for ground water, assign a score of 50; otherwise, assign the highest Nearest Well score from PA Table 2. If no drinking-water wells exist within 4 miles, assign a score of zero.	(50, 20, 10, 5, 3, 2, or 0)	18	Ref 1. page 9
6. WELLHEAD PROTECTION AREA (WHPA): Assign a score of 20 if any portion of a designated WHPA is within 1/4 mile of the site; assign 5 if from 1/4 to 4 miles.	(20, 5, or 0)	0	
7. RESOURCES: A score of 5 is assigned.	(5)	5	
T =		663	

WASTE CHARACTERISTICS

8. A. If you have identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(100 or 32)		
B. If you have NOT identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4.	(100, 32, or 18)	18	
WC =		18	

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(adjusts to a maximum of 100)

49.2

Calculations for Secondary Target Populations

Albuquerque Municipal Wells (AMW)*

Seventy wells make up the City of Albuquerque municipal water supply system east of the Rio Grande. This system serves 370,000 individuals (or 5,285.7 people/well).

Kirkland Air Force Base Wells (KAFW)*

Twelve active wells serve the Kirkland Air Force Base, a population of 22,000 (or 1,833 persons/well).

Private Wells (PW)

Privately owned wells within the 4 mile radius are located to the east of the site and are used for domestic, agricultural, and possibly industrial uses. These wells serve approximately 735 persons (3.3 persons per house-well) outside of the City of Albuquerque water distribution system.

Ground water is the drinking water supply source for an estimated 46,687 individuals within a four mile radius of the site.

<u>Distance (miles)</u>	<u>Population</u>	<u>Wells</u>
0 - 1/4	0	0
>1/4 - 1/2	13	4 PW
>1/2 - 1	66	20 PW
>1 - 2	10,756	2 AMW, 56 PW
>2 - 3	25,139	4 AMW, 1 KAFB, 100 PW
>3 - 4	<u>24,809</u>	4 AMW, 1 KAFB
Total population	<u>60,783</u>	

* blended systems

Site Name:
Date:

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to ¼ mile	0	20	1	2	5	18	52	163	521	1,633	5,214	16,325	—
> ¼ to ½ mile	13	18	1	1	3	10	32	101	323	1,012	3,233	10,121	1
> ½ to 1 mile	66	9	1	1	2	5	17	52	167	522	1,668	5,224	2
> 1 to 2 miles	10,756	5	1	1	1	3	9	29	94	294	939	2,938	294
> 2 to 3 miles	25,139	3	1	1	1	2	7	21	68	212	678	2,122	212
> 3 to 4 miles	24,809	2	1	1	1	1	4	13	42	131	417	1,306	131
Nearest Well =		18	Score =										640

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to ¼ mile	_____	20	1	2	5	18	52	163	521	1,633	5,214	16,325	_____
> ¼ to ½ mile	_____	20	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> ½ to 1 mile	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 1 to 2 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 2 to 3 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 3 to 4 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
Nearest Well =			Score =										

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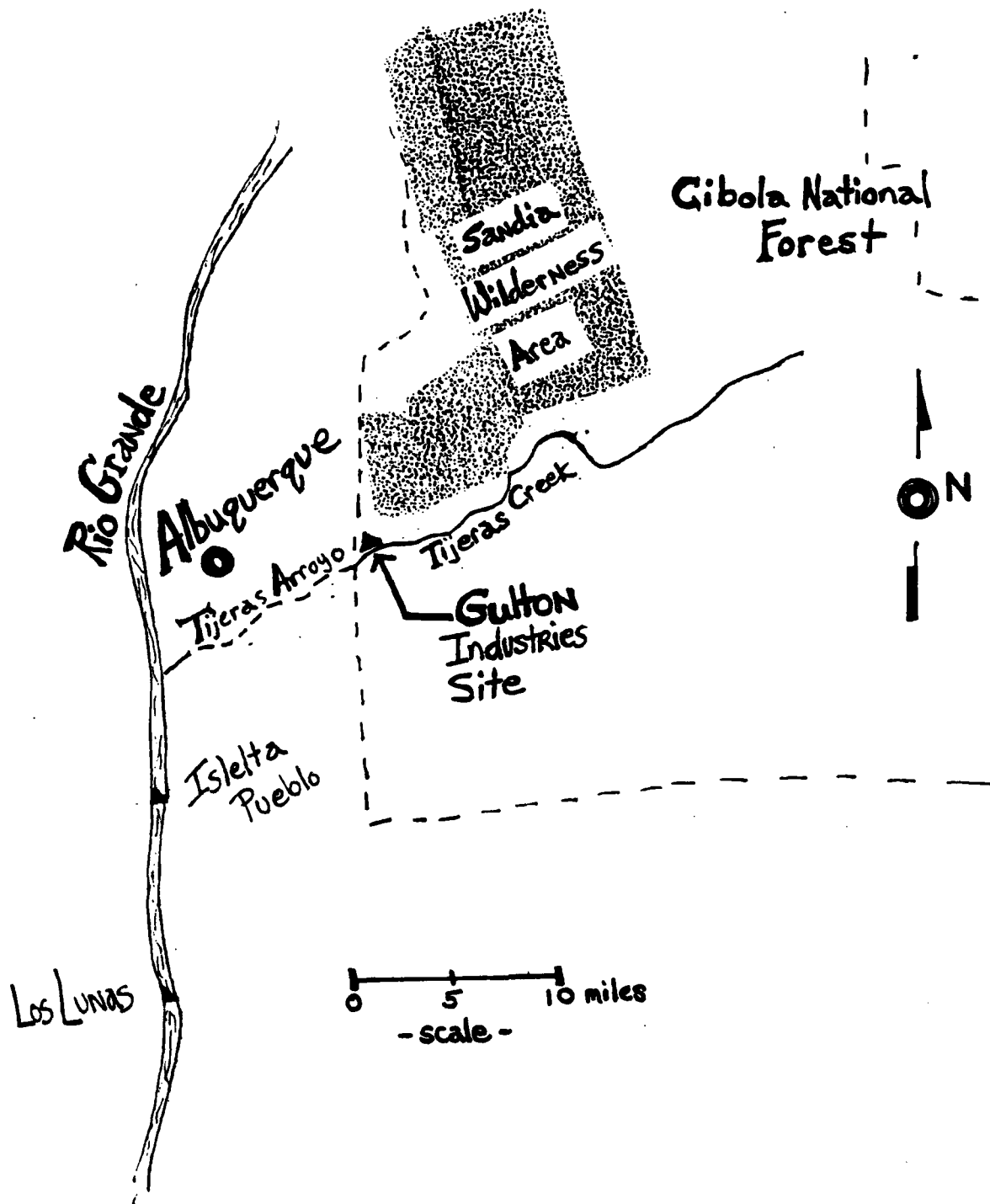
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Site Name: Gulton Industries 10
Date: Sept., 1991

SURFACE WATER PATHWAY
MIGRATION ROUTE SKETCH

Provide a Sketch of the Surface Water Migration Route:

(include runoff route, probable point of entry, 15-mile target distance limit, intakes, fisheries, and sensitive environments)



SURFACE WATER PATHWAY CRITERIA LIST

Site Name: Gulton Industries
Date: Sept. 1991

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release and identifying primary targets. It is expected that not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize a suspected release or to identify primary targets. This chart will record your professional judgment in evaluating these factors.

The "Suspected Release" section of the chart guides you through evaluation of some site, source, and pathway conditions to help hypothesize whether a release from the site is likely. If a release is suspected, use the "Primary Targets" section to guide you through evaluation of some conditions that will help identify targets likely to be exposed to hazardous substances. You may use this section of the chart more than once, depending on the number of targets you feel may be considered "primary." In the "Primary Targets" section on this sheet, record the responses for the target that you feel has the highest probability of being exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make sure that you assign a Likelihood of Release value of 550 for the pathway.

SURFACE WATER PATHWAY			
SUSPECTED RELEASE			PRIMARY TARGETS
Y	N	UNKNOWN	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is surface water nearby?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is waste quantity particularly large?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the drainage area large?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is precipitation heavy or infiltration rate low?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sources poorly contained or prone to runoff or flooding?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is a runoff route well defined (e.g., ditch or channel leading to surface water)?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is vegetation stressed along the probable runoff path?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are suspected contaminants highly persistent in surface water?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sediments/water unnaturally discolored?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is wildlife unnaturally absent?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has deposition of waste into surface water been observed?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is ground water discharge to surface water likely?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there any circumstantial evidence of surface water contamination?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other criteria? <u>Surface water recharging groundwater</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SUSPECTED RELEASE?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is any target nearby? If yes:
			<input type="checkbox"/> Drinking-water intake
			<input type="checkbox"/> Fishery
			<input checked="" type="checkbox"/> Sensitive environment
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has an intake, fishery, or recreational area been closed?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there any circumstantial evidence of surface water contamination at or downstream of a target?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does any target warrant sampling? If yes:
			<input type="checkbox"/> Drinking-water intake
			<input type="checkbox"/> Fishery
			<input checked="" type="checkbox"/> Sensitive environment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other criteria? _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PRIMARY INTAKE(S) IDENTIFIED?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PRIMARY FISHERY IDENTIFIED?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED?

Summarize the rationale for suspected release (attach an additional page if necessary):

NMED records concerning NPDES permit indicates that the discharge exceeded permit parameters. In addition, stained & acidic soils are found in drainages on site.

Summarize the rationale for Primary Targets (attach an additional page if necessary):

Tijeras Creek - wetland on site. Tijeras Creek can be characterized as a wetland by the presence of obligate plant species such as Populus deltoides.

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SURFACE WATER PATHWAY

Pathway Characteristics

Yes No

YRS

1000

A

References

- (500,400,300 or 100)

Floodplain

Score

Site in annual or 10-yr floodplain

500

Site in 100-yr floodplain

400

Site in 500-yr floodplain

300

Site outside 500-yr floodplain

100

50

(500,400,300 = 100)

Intake Name	Water Body Type	Flow	People Served
		cfs	
		cfs	
		cfs	

 people x 10 =

- Are any intakes part of a blended system? Yes _____ No _____

(50.20.10.2.1. = 0)

(20.10.2.1 - 2)

- _____

5

5

T **2**

5

Site Name:
Date:

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow Characteristics (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category											Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	
< 10 cfs	_____	20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	_____
10 to 100 cfs	_____	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> 100 to 1,000 cfs	_____	1	0	0	1	1	2	5	16	52	163	521	1,633	_____
> 1,000 to 10,000 cfs	_____	0	0	0	0	0	1	1	2	5	16	52	163	_____
> 10,000 cfs or Great Lakes	_____	0	0	0	0	0	0	0	1	1	2	5	16	_____
3-mile Mixing Zone	_____	10	1	3	8	26	82	261	816	2,607	8,162	26,088	81,663	_____
Nearest Intake = _____			Score = _____											

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body		Dilution Weight
Water Body Type	OR Flow Characteristics	
minimal stream	flow less than 10 cfs	1
small to moderate stream	flow 10 to 100 cfs	0.1
moderate to large stream	flow greater than 100 to 1,000 cfs	N/A
large stream to river	flow greater than 1,000 to 10,000 cfs	N/A
large river	flow greater than 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	flow 10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

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**SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET**

Date: Sept, 1991

LIKELIHOOD OF RELEASE

Enter the Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release	No Suspected Release
(140)	(500, 400, 300 = 100)
550	

References

HUMAN FOOD CHAIN THREAT TARGETS

8. Determine the water body types and flows (if applicable) for all fisheries within the 15-mile target distance limit. If there are no fisheries within the target distance limit, assign a Targets score of 0 at the bottom of this page and proceed to page 15.

Fishery Name	Water Body Type	Flow
<u>Rio Grande</u>	<u>Large Stream</u>	<u>845</u> cfs
		cfs
		cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the Primary Fisheries:

10. SECONDARY FISHERIES: If you have not identified any Primary Fisheries, assign a Secondary Fisheries score from the table below using the LOWEST flow at any fishery within the 15-mile target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

(300 = 0)	
0	
(210, 30, 12 = 0)	(210, 30, 12 = 0)
12	
(300, 210, 30, 12 = 0)	(210, 30, 12 = 0)
12	

Ref 1 p. 8

T =

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**SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET**

Site Name: Gulfport Industries
Date: Sept, 1991

LIKELIHOOD OF RELEASE

Enter the Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release	No Suspected Release
(1500)	(1500, 4000, 5000 = 100)
550	

Reference:

ENVIRONMENTAL THREAT TARGETS

11. Determine the water body types and flows (if applicable) for all surface water sensitive environments within the 15-mile target distance limit (see PA Tables 4 and 5). If there are no sensitive environments within the 15-mile target distance limit, assign a Targets score of 0 at the bottom of this page, and proceed to page 17.

Environment Name	Water Body Type	Flow
<u>Tijeras Creek</u>	<u>Wetlands</u>	<u>0-500 cfs</u>
<u>Rio Grande</u>	<u>Wetlands</u>	<u>845 cfs</u>
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 13. List the Primary Sensitive Environments:

Tijeras Creek - Wetlands

13. SECONDARY SENSITIVE ENVIRONMENTS:

- A. For Secondary Sensitive Environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	

Sum =

- B. If NO Secondary Sensitive Environments are located on surface water bodies with flows of 100 cfs or less, assign a score of 10.

T =

300	
300	

Ref

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7c
Site Name: Gulton Industries
Date: Sept, 1991

PA TABLE 5: SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

<i>Sensitive Environment</i>	<i>Assigned Value</i>
Critical habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding	
National river reach designated as recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	
State designated areas for the protection/maintenance of aquatic life under the Clean Water Act	5
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

**PA TABLE 6: SURFACE WATER
WETLANDS FRONTAGE VALUES**

<i>Total Length of Wetlands</i>	<i>Assigned Value</i>
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

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Date: *Sept, 1991*

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**SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

WASTE CHARACTERISTICS	A	B
	<i>Suspected Release</i> <small>(100 or 32)</small>	<i>No Suspected Release</i> <small>(100, 32, or 18)</small>
14. A. If you have identified ANY Primary Targets for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	32	
B. If you have NOT identified any Primary Targets for surface water, assign the waste characteristics score calculated on page 4.		
WC =	32	

SURFACE WATER PATHWAY THREAT SCORES

Threat	<i>Likelihood of Release (LR) Score</i> <small>(from page 12)</small>	<i>Targets (T) Score</i>	<i>Pathway Waste Characteristics (WC) Score</i> <small>(determined above)</small>	<i>Threat Score</i> <small>$LR \times T \times WC / 82,500$</small>
Drinking Water	550	5	32	<small>(subject to a maximum of 100)</small> 1.1
Human Food Chain	550	12	32	<small>(subject to a maximum of 100)</small> 2.5
Environmental	550	300	32	<small>(subject to a maximum of 50)</small> 60

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

<small>(subject to a maximum of 100)</small> 63.7

SOIL EXPOSURE PATHWAY CRITERIA LIST

Site Name: Gulfstream Industries
Date: Sept., 1991

This chart provides guidelines to assist you in hypothesizing the presence of a resident population. It is expected that not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize resident populations. This chart will record your professional judgment in evaluating this factor.

Use the resident population section to guide you through evaluation of some site and source conditions that will help identify targets likely to be exposed to hazardous substances. You may use this section of the chart more than once, depending on the number of nearby people you feel may be considered part of a resident population. Record the responses for the resident population target that you feel has the highest probability of being exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question.

SOIL EXPOSURE PATHWAY				
SUSPECTED CONTAMINATION	RESIDENT POPULATION			
	Y E S	N O	U N K N O W N	
Surficial contamination is assumed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are there residences, schools, or day care facilities on or within 200 feet of areas of suspected contamination?
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are residences, schools, or day care facilities located on adjacent land previously owned or leased by the site owner/operator?
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is there an overland migration route that might spread hazardous substances near residences, schools, or day care facilities?
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are there any reports of adverse health effects from onsite or adjacent residents or students, exclusive of apparent drinking water or air contamination problems?
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any offsite property warrant sampling?
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other criteria? _____
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RESIDENT POPULATION IDENTIFIED?

Summarize the rationale for resident population (attach an additional page if necessary):

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SOIL EXPOSURE PATHWAY SCORE SHEET

Site Name: *Gulton Industries* 19
Date: *Sept., 1991*

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do any people attend school or day care on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the facility active? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, estimate the number of workers: <u>12</u>	

LIKELIHOOD OF EXPOSURE

	A Suspected Contamination	B No Suspected Contamination	References
1. SUSPECTED CONTAMINATION: Surficial contamination is assumed. A score of 550 is assigned.	1550 550		
LE =			

RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). _____ people x 10 =	0 (50 = 0)												
3. RESIDENT INDIVIDUAL: If you have identified any Resident Population (Factor 2), assign a score of 50; otherwise, assign a score of 0.	0 (15, 10, 5 = 0)												
4. WORKERS: Assign a score from the following table based on the total number of workers at the facility and nearby facilities with suspected contamination:													
<table border="1"> <thead> <tr> <th>Number of Workers</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> </tr> <tr> <td>1 to 100</td> <td>5</td> </tr> <tr> <td>101 to 1,000</td> <td>10</td> </tr> <tr> <td>> 1,000</td> <td>15</td> </tr> </tbody> </table>	Number of Workers	Score	0	0	1 to 100	5	101 to 1,000	10	> 1,000	15	5		
Number of Workers	Score												
0	0												
1 to 100	5												
101 to 1,000	10												
> 1,000	15												
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value from PA Table 7 for each terrestrial sensitive environment that is located on an area of suspected contamination:													
<table border="1"> <thead> <tr> <th>Terrestrial Sensitive Environment Type</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	Terrestrial Sensitive Environment Type	Value	_____	_____	_____	_____							
Terrestrial Sensitive Environment Type	Value												
_____	_____												
_____	_____												
Sum =	0 (5)												
6. RESOURCES: A score of 5 is assigned.	5												
T =	5												

WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4.	WC =	18 (100, 32, or 18)	
---	------	------------------------	--

RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

NEARBY POPULATION THREAT SCORE:

Assign a score of 2

SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

(subject to a maximum of 100)	1
	2
(subject to a maximum of 100)	3

Ref 2, p 9

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Site Name: Cotton Island 20
Date: Sept, 1991

PA TABLE 7: SOIL EXPOSURE PATHWAY TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

Terrestrial Sensitive Environment	Assigned Value
Terrestrial critical habitat for Federally designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	
Terrestrial habitat used by State designated endangered or threatened species	50
Terrestrial habitat used by species under review for Federally designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

AIR PATHWAY CRITERIA LIST

Site Name: **Gulton Industries**
 Date: **Sept, 1991**

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release. It is expected that not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize a suspected release. This chart will record your professional judgment in evaluating this factor.

The "Suspected Release" section of the chart guides you through evaluation of some conditions to help hypothesize whether a release from the site is likely. For the Air Pathway, if a release is suspected, "Primary Targets" are any residents, workers, students, or sensitive environments within 1/4 mile of the site.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make sure that you assign a Likelihood of Release value of 550 for the pathway.

AIR PATHWAY			
SUSPECTED RELEASE			PRIMARY TARGETS
Y :	N :	U :	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>If you suspect a release to air, evaluate all populations and sensitive environments within 1/4 mile (including those onsite) as Primary Targets.</i>
		Have odors been reported?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Has a release of hazardous substances to the air been directly observed?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Are there any reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Is there any circumstantial evidence of an air release?	
<input type="checkbox"/>	<input type="checkbox"/>	Other criteria? _____	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SUSPECTED RELEASE?	

Summarize the rationale for suspected release (attach an additional page if necessary):

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AIR PATHWAY SCORES

Site Name: GULF INDUSTRIES 22
Date: Sept. 1991

Pathway Characteristics

Do you suspect a release (see Air Pathway Criteria List, page 21)?

Yes ☐ No ☒

Distance to the nearest individual:

Wetlands 0.1 ft

LIKELIHOOD OF RELEASE

1. SUSPECTED RELEASE: If you suspect a release to air (see page 21), assign a score of 550, and use only column A for this pathway.
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500, and use only column B for this pathway.

LR =

A	B
Suspected Release	No Suspected Release
(550)	(500)
	500
	500

References

Ref 1 p. 10

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a release of hazardous substances through the air (see Air Pathway Criteria List, page 21). _____ people x 10 =
4. SECONDARY TARGET POPULATION: Determine the number of people within the 4-mile target distance limit, and assign the total population score from PA Table 8.
5. NEAREST INDIVIDUAL: If you have identified any Primary Targets for the air pathway, assign a score of 50; otherwise, assign the highest Nearest Individual score from PA Table 8.
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from air hazardous substances (see Air Pathway Criteria List, page 21).

Sensitive Environment Type	Value
_____	_____
_____	_____
_____	_____

Sum =

7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.
8. RESOURCES: A score of 5 is assigned.

T =

	17
(50, 20, 7, 2, 1, = 0)	(20, 7, 2, 1, = 0)
	20
	3.45
(5)	(5)
5	5
	45.45

Ref 2 p. 9

Ref 1 p. 10

WASTE CHARACTERISTICS

9. A. If you have identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B. If you have NOT identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4.

WC =

(100 = 32)	
(100, 32, = 18)	(100, 32, = 18)
	18
	18

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82.500}$$

(Subject to a maximum of 100)

4.95

Site Name:

Date:

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category												Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	
Onsite	12	20	1	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	2
>0 to 1/4 mile	0	20	1	1	1	4	13	41	130	408	1,303	4,081	13,034	40,811	1
> 1/4 to 1/2 mile	13	2	0	0	1	1	3	9	28	88	282	882	2,815	8,815	0
> 1/2 to 1 mile	260	1	0	0	0	1	1	3	8	26	83	261	834	2,812	1
> 1 to 2 miles	16,000	0	0	0	0	0	1	1	3	8	27	83	266	833	8
> 2 to 3 miles	22,500	0	0	0	0	0	1	1	1	4	12	38	120	376	4
> 3 to 4 miles	22,600	0	0	0	0	0	0	1	1	2	7	23	73	229	2
Nearest Individual =		20													Score = 17

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

Distance	Distance Weight	Sensitive Environment Type and Value (from PA Table 8 or 9)	Product
Onsite	0.10	Wetland (0.1 to 1 mile) 25	2.5
0-1/4 mi	0.025		
1/4-1/2 mi	0.0054	Santa Wilderness	0.54
		Cibola National Forest	0.40
Total Environments Score =			3.45

SITE SCORE CALCULATION

	S	S ²
GROUND WATER PATHWAY SCORE (S _{gw}):	49.2	2,420.6
SURFACE WATER PATHWAY SCORE (S _{sw}):	63.7	4,057.7
SOIL EXPOSURE PATHWAY SCORE (S _{se}):	3.0	9.0
AIR PATHWAY SCORE (S _a):	4.95	24.5
SITE SCORE: $\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_{se}^2 + S_a^2}{4}} =$		40.3

RECOMMENDATION

A SSI should be conducted to determine: 1) the nature and extent of hazardous substances remaining on the site; and 2) the potential for release of any hazardous substances to the surface water and pathways. Though receiving a high Prescore, the ground water pathway is not thought to be a significant route for contaminant migration.

SUMMARY

	YES	NO
1. Is there a high possibility of a threat to nearby drinking water wells by migration of hazardous substances in ground water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A. If yes, identify the wells recommended for sampling during the SI.		
B. If yes, how many people are served by these threatened wells? _____		
2. Are any of the following suspected to have been exposed to hazardous substances through surface water migration from the site?		
A. Drinking water intake	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. Fishery	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Sensitive environment: wetland, critical habitat, others	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. If yes, identify the targets recommended for sampling during the SI.		

3. Do people reside or attend school or day care on or within 200 ft of any area of suspected contamination?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain:	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REFERENCES

1. NMEID, August 30, 1990, Preliminary Assessment of the Gulton Industries Site, Albuquerque, New Mexico (on file at USEPA, Region VI, Dallas, TX).
2. NMED, September, 1991, Screening Site Inspection Workplan, Gulton Industries Site, Albuquerque, New Mexico (on file at USEPA, Region VI, Dallas, TX).